

## IN THE SPECIFICATION

Please replace the paragraph beginning on the middle of page 25 ("In certain embodiments...") with the following amended paragraph:

-- In certain embodiments of the invention (not shown), it is desirable that there be communication from the wireless microphone receiver system to the one or plurality of transmitter systems. This back channel or return-channel is used to convey small amounts of digital information to modify performance characteristics of the transmitter systems automatically and without transmitter user intervention. The required data throughput of the return-channel is small (much less than one kilobit per second) compared to the relatively high data throughput required to convey the digital audio signal representation from one or more transmitters to the receiver. In these embodiments, substantially continuous operation of the return-channel operation is not required. Because of the relatively low data throughout and only occasional need for return channel communication, the return channel may be implemented with known inexpensive wireless infrared, or preferably, RF wireless technology. For example, the Infrared Data Association (irDA) defines infrared wireless communication standards, and low-cost integrated circuits for infrared communication are available. Inexpensive and low-power integrated circuits for RF wireless standards are also available, for example, devices using the BlueTooth™ Human Interface Device (HID) specification as defined by the IEEE 802.15.1 standard. According to the invention, the return-channel is used in certain embodiments to signal each of the transmitter systems for a corresponding receiver system to increase or decrease the transmitter system power in order to improve

receiver system performance or to increase transmitter battery life, respectively. In certain embodiments of the invention, the receiver system includes a power sensing circuit for determining determines the approximate signal-to-noise ratio (SNR) or received power level signal according to each of the received transmitter signals and a power level feedback signal transmitter for communicating/transmitting communicates to each of the transmitter systems a power level feedback signal, such as a message or command, via the return-channel instructing the transmitter to increase or decrease its power in order to maintain an approximately equal SNR ratio as detected by the receiver system among all operating transmitters sufficient for reliable error-free operation. In certain embodiments, this corresponds to a received SNR of at least about 10 dB to 20 dB (bit energy to noise energy decibel ratio). Adaptive power management of the transmitter systems by the receiver system also helps to reduce interference caused by the transmitter systems to other devices operating in the same RF band of frequencies and reduces the potential for interference between transmitter systems. In certain embodiments of the invention, the return channel may be used to convey from the receiver to transmitters a change in the operating frequency of the transmitters in the event of severe spectrum congestion.--